

New Forest Mercury Vapour Light Records for 1976

By L. W. SIGGS*

The year was remarkable for the drought which lasted through most of June, July and August, but was followed by a wet autumn. Some of the possible effects of the unusual weather are noted below, but it will be more interesting to see what effects show themselves in 1977.

Details of the catch of macrolepidoptera in the Robinson trap at Minstead are as follows: —

			Specimens		Species
			Total	Average	Average
	Nights				
March	...	31	605	20	4
April	...	30	995	33	7
May	...	31	863	29	13
June	...	30	7,848	262	38
July	...	31	10,481	338	52
August	...	31	5,534	179	33
September	...	30	1,712	57	13
October	...	28	1,335	48	10
November	...	9	223	25	5

Overall this was not a peak year, but it was noticeable that many species were earlier than usual, a fact which accounts for the high figure for June, a fairly good one (but by no means a record) for July, but a poor one for August. The list below which shows record catches for the year is longer than usual. It contains only one abundant species and most such species were well below average. The list of those species which are occasional is also longer than usual.

There were three additions to the Minstead list: *Apoda avellana* L., *Spilosoma urticae* Esp. and *Callimorpha dominula* L. This record consisted of the two forewings left on the trap collar, presumably by a predatory bird who had not learnt about protective coloration; but, of course, he had no previous opportunity of learning about *dominula* so far away from its riverside haunts.

The total number of species taken in 1976 was 340.

There were record catches in the following species; the figures in brackets show the previous best since 1961: *Drepana cultraria* Fab. 56 (14); *Scopula imitaria* Hübn. 15 (4); *Chloroclysta rectangulata* L. 18 (13); *Peribotodes rhomboidaria* D. & S. 275 (229); *Euxoa tritici* L. 13 (4); *Agrotis segetum* D. & S. 108 (74); *A. exclamationis* L. 9,366 (7,244); *A. puta* Hübn. 1,342 (814); *Paradiarsia glareosa* Esp. 68 (55); *Hada nana* Hufn. 14 (4); *Mythimna pallens* L. 850 (473); *M. comma* L. 119 (83); *Lithophane leautieri* Bois. 59 (34); *Conistra vaccinii* L. 1,016 (815); *Parastichtis suspecta* Hübn. 26 (13); *Xanthia aurago* D. & S. 27 (10); *Amphipyra pyramidea* L. 29 (16); *A. berbera* Rungs. 92 (58); *Oligia versicolor* Borkh. 79

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(17); *Luperina testacea* D. & S. 229 (62); *Hoplodrina ambigua* D. & S. 155 (12); *Caradrina clavipalpis* Scop. 41 (17); *Colocasia coryli* L. 58 (41); *Laspeyria flexula* D. & S. 111 (68).

The following species are occasional here and were welcome in 1976: *Idaea seriata* Schrank.; *Mesoleuca albicillata* L.; *Eulithis mellinata* Fab.; *Colostigia multistrigaria* Haw.; *Perizoma albulata* D. & S.; *P. flavofasciata* Thunb.; *Eupithecia succenturiata* L.; *Plagodis pulveraria* L.; *Cerapteryx graminis* L.; *Orthosia opima* Hübn.; *Mythimna favicolor* Barr.; *M. obsoleta* Hübn.; *Aporophila lutulenta* D. & S.; *Conistra rubiginea* D. & S.; *Acronicta megacephala* D. & S.; *Mormo maura* L.; *Cosmia pyralina* D. & S.; *Mesoligia furuncula* D. & S.; *Oria musculosa* Hübn.; *Stilbia anomala* Haw.; *Elaphria venustula* Hübn.

Migrants

Not a good year for migrants, but it was pleasant to see *M. vitellina* again: *Plutella xylostella* L. (*maculipennis* Curt.) (9); *Udea ferrugalis* Hübn. (1); *Nomophila noctuella* D. & S. (40); *Lithosia quadra* L. (13); *Agrotis ipsilon* Hufn. (147); *Peridroma saucia* Hübn. (*porphyrea* sensu Edelsten) (7); *Mythimna vitellina* Hübn. (1); *Autographa gamma* L. (133).

Polymorphism

<i>Biston betularia</i> L.		<i>Idaea aversata</i> L.	
typical	21 (78%)	<i>remutata</i>	138 (75%)
<i>carbonaria</i>	3 (11%)	<i>aversata</i>	47 (25%)
<i>insularia</i>	3 (11%)		

This year I also used an assembly trap in woodland nearby, "baited" with female *Biston betularia* and attracted the following males: typical 69 (84%), *carbonaria* 2 (2%), *insularia* 11 (13%).

<i>Hydromena furcata</i> Thunb.	Type 50, ab. <i>obscura</i> Prout 1.
<i>Epirrita dilutata</i> D. & S.	Type 64, ab. <i>melana</i> Prout 2.
<i>Ennomos erosaria</i> D. & S.	Pale form 25, dark form 4.
<i>Alcis repandata</i> L.	Type 65, f. <i>consonaria</i> Hübn. 2.
<i>Ectropis bistortata</i> Goeze.	Type 14, melanic 1.
<i>Eilema griseola</i> Hübn.	Type 9, ab. <i>flava</i> 2.
<i>Eilema deplana</i> Esp.	Type nil, vars. 16.
<i>Diarsia mendica</i> Fab.	Type 54, ab. <i>primulae</i> Esp. 1.
<i>Atethmia centrargo</i> Haw.	Type 3, ab. <i>unicolor</i> Stdgr. 1.
<i>Xanthia icteritia</i> Hufn.	Type 126, ab. <i>imperfecta</i> Tutt, 1. ab. <i>flavescens</i> Esp. 1.
<i>Luperina testacea</i> D. & S.	Type 228, ab. <i>nigrescens</i> Tutt, 1.
<i>Charanyca trigrammica</i> Hufn.	Type 32, ab. <i>obscura</i> Tutt, 1. ab. <i>pallida-linea</i> Tutt, 1.

The Drought

Mr. E. H. Wild raised some interesting points in his article in *Ent. Rec.*, 88: 260, regarding second broods in 1976. He says that *Agrotis exclamatoris* L. "occasionally throws up a small second brood". At Minstead there has been a second brood of this species between August and October each year since 1958 without exception. In 1976, there were 9,075 in the first brood to 27th July. The second brood started on 1st August, reached a peak of 39 on the 12th August and finished

on 23rd September with a total of 291.

It was a rather poor year for *Laotoë populi* L., only 17, finishing on 12th August.

There were 165 *Leucania pallens* L. from 4th June to 18th July and 685 from 29th July to 23rd September.

We had no late brood of *O. sambucaria* L., *E. pulchellata* Steph., *C. morpheus* Hufn., and no *P. moneta* F. which is very occasional here. I found no species with an unexpected second brood.

C. nupta L. is only occasional and turned up on 12th August and 3rd September — nothing exceptional, but *A. pyramidea* L. began on 13th July which was early and numbers were up, *A. berbera* Rungs. began on 12th July which was early and numbers were high. *A. tragopogonis* L. was also early on 12th July. *C. lutea* Ström. was normal on 16th September. Other early emergences of autumn species were *Aethmia xerampelina* Hübn. (20th August), *Agrochola macilenta* Hübn. (26th August — very early as it usually waits till October), *Dichonia aprilina* L. (24th September), *Agrochola lota* Cl. (27th September), and *Colotois pennaria* L. (27th September).

I had 55 species in which the last capture was considerably later than usual. Presumably the drought conditions inhibited any desire to remain in the pupa. Will this result in an early emergence season next year or will the hard winter adjust the cycle?

One wonders what will be the effect of the drought on next year's numbers. Most birch trees were in yellow leaf by the end of August, and although there was subsequently a fresh growth when the rain came, many birch feeding larvae must have died. Beech suffered similarly. Lichens were particularly dried up. I had hoped to breed some *Eilema deplana* Esp. because I have never taken a type male at Minstead and only two type females. Two females (vars.) obliged with a few ova but I was unable to find fresh lichen which the larvae were able to eat. Perhaps, too, there is some significance in the fact that bluetits have been noticeably scarcer this winter. Could this be due to shortage of larvae during the drought?

PARCTOPA ONONIDIS ZELL. IN S.E. LONDON. — On 7th July, 1976 my first specimen of the above moth made its appearance at m.v. light here. This very local and somewhat elusive Gracillariid is not included in "Woolwich Surveys" (1909) — the early list of the fauna of this district. Though so small and narrow, the gleaming silver-white marks on a dark ground give it an exceedingly neat and bright aspect in a good light. About 15 years ago, on a visit to Riddlesdown, Surrey, with the late lamented Stanley Wakely, we searched for the mines or spinings of *P. ononidis* on clover at a spot where he had previously found them, but in vain. — A. A. ALLEN, 49 Montcalm Road, Charlton, London, SE7 8QG.